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09/871,465	05/30/2001	Jesse Donaldson	PALM-3639	1512

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EXAMINER	
PENDLETON, BRIAN T	

ART UNIT	PAPER NUMBER
2644	4

DATE MAILED: 03/23/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No. 09/871,465	Applicant(s) DONALDSON ET AL.	
	Examiner Brian T. Pendleton	Art Unit 2644	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *30 May 2001*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-27* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-27* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

DETAILED ACTION

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

Claims 1, 2, 4, 6, 9-11, 14-16, and 18-26 are rejected under 35 U.S.C. 102(e) as being anticipated by Kanamori et al. Kanamori et al teach a portable telephone set (which is handheld) comprising first audio source 101 coupled to first variable attenuator/amplifier 203, second audio source 110 coupled to second variable attenuator/amplifier 205, control unit 111 and mixer 206 for outputting an audio signal. The first audio source 101 is a talking voice signal while second audio source 110 is a music information storage part (see column 5 lines 15-16). The main control unit 111 instructs the first and second variable attenuators/amplifiers 203, 205 to adjust their volumes via the gain control part 201. See column 5 lines 27-42. The main control unit 111 acts as a priority logic unit for assigning priority levels to the audio sources since determines the volumes of the voice signal from source 101 and the music signal from source 110 based on whether the phone is in music replay mode, communication mode, or when a call is received over the radio communication network during music replay.

Specifically, column 6 lines 12-15 indicate that during telephone communication, the music is muted using gain control part 201, while column 6 lines 43-47 indicate that during music replay, voice signals are muted using gain control part 201. When a call is received during music replay, the gain control part 201 adjusts the volume of the music and outputs a ring tone through the first variable attenuator/amplifier 203. See column 7 lines 11-53. Therefore the main control unit 111 has programmed rules for determining the volume of first and second audio sources and demonstrates a priority system. Claim 1 is met. As to claim 2, the first audio source is a ring tone which is a signal event and the second audio source is music which is continuous. As to claim 4, the apparatus provides for an adjustment of the music signal and voice signal once the user starts talking after answering the telephone responding to a ring tone. See column 7 line 54 - column 8 line 18. Therefore a priority is established for two continuous audio sources. Per claim 6, main control part 111 is coupled to A/D converter 104, representing the priority logic unit. As to claim 9, the first audio source is a wireless communication signal. Per claims 10 and 11, music information storage part 110 is a digital storage medium and can be the first audio source and the talking voice be the second audio source. As to claim 14, the apparatus performs the claimed method. The main control unit 111 establishes a priority for the first and second audio sources. The ring tone has a higher priority than the music signal since the music signal is lowered in volume or the ring tone is increased in volume so that the ring tone can be recognized by the user. Therefore one of the audio sources is adjusted in level and the sources are combined in mixer 206. Regarding claim 15, inherently there is a predetermined level in

which one of the audio sources is adjusted in volume. Thus, the new volume level establishes a predetermined ratio between the two audio sources. Per claim 16, column 7 lines 25-33 states that one source, the music signal, is lowered in volume in response to a ring tone. As to claim 18, again the method claimed is performed by the Kanamori et al invention. Specifically, a first audio signal (ring tone) is generated, a second audio signal (music) is generated, whereby the music has a lower priority than the ring tone, and the music is attenuated and combined with the ring tone and rendered audible through speaker 102. Per claim 19, priority is assigned to the audio sources since either the music is attenuated or ring tone amplified so that the ring tone is clearly heard. As to claim 20, the alert tone is the ring tone and the other signal is music. Per claim 21, Kanamori et al teach that the first audio signal is the ring tone, second audio signal is music, the music having a lower priority, whereby the ring tone is amplified (column 7 lines 46-50) and combined with the music and output to the speakers. As to claim 22, as mentioned before, priority is assigned to the first and second audio signals. As to claim 23, the alert tone is the ring tone and the other signal is music. Per claim 24, the main control unit 111 controls operation of the telephone device and inherently executes computer instructions which establish the priority between the audio sources and adjust the volume level of the signals. Regarding claim 25, there is a predetermined level in which one of the audio sources is adjusted in volume. Thus, the new volume level establishes a predetermined ratio between the two audio sources. Mentioned above, only one source is adjusted in volume, meeting claim 26.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

Claims 3, 5, 7, 8, 12 and 13 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kanamori et al in view of Kim. Kanamori et al teach a handheld device having first and second audio sources, first and second variable attenuators/amplifiers, a priority logic unit, mixer and output. Kanamori et al do not teach that the device has more than two audio sources. However, that feature was well known in the art as evidenced by Kim. Kim discloses a mobile entertainment and communication device having more than two audio sources (alarm 123, computer jack 124 for connection to media players, memory card 200). It would have been obvious to one of ordinary skill in the art at the time of invention to include additional audio sources in the invention of Kanamori et al since it was already practiced in the art and provided an user with greater capabilities in the telephone. Regarding claim 5, the alarm 123 and tone ring are two signal event audio sources. Per claim 7, Examiner takes Official Notice that cellular phones at the time of invention comprised memory buffers, said buffers used to store a signal event such as a message received signal which is replayed at a later time. As to claim 8, it was obvious to reproduce stereophonic music with the advantage of better sound localization and "feel" of the audio. Per claims 12

and 13, Kanamori et al do not teach a flash memory for the music storage or that the memory is removable. Kim discloses memory card 200 which is removable and a flash memory unit (see column 2 lines 20-22).

Claims 17 and 27 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kanamori et al over Roberts. Kanamori et al teach a handheld device having first and second audio sources, first and second variable attenuators/amplifiers, a priority logic unit, mixer and output. Priority is established for the first and second audio sources and their levels are adjusted according to their priority. Kanamori et al do not teach priority being established based on the level of one of the audio sources. Roberts discloses an automatic mixer priority circuit having a plurality of audio sources and variable attenuator/amplifiers for each audio source. Priority of the audio sources is established based on the proportion of the signal level of the particular audio source to the sum of the signal levels of all the audio sources. See column 3 lines 8-17. The audio source with the highest level calculated by the sensing resistor 26 and the all channel logarithmic detector 32 receives the highest priority. This feature was advantageous because it allowed the system to adapt to changes in the relative levels of the audio sources. Therefore, it would have been obvious to one of ordinary skill in the art at the time of invention to incorporate the teachings of Roberts in the invention of Kanamori et al.

Conclusion

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Garvis, US Patent 5,647,011 and Hadley et al, US Patent 5,243,640.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Brian T. Pendleton whose telephone number is (703) 305-9509. The examiner can normally be reached on M-F 7-4:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Forester W. Isen can be reached on (703) 305-4386. The fax phone number for the organization where this application or proceeding is assigned is (703) 872-9314.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 305-4700.

Brian Tyrone Pendleton
March 17, 2004

MINSUN OH HARVEY
EXAMINER